

## PART I. Investigating the United States Population

1. How many of 20 cubes would represent the racial breakdown of the US population?

	Blue (white)	Green (Black)	Orange (Hispanic)	Red (Asian)	Total
<b>Predict</b>					<b>20</b>

**Simulation Bag 1:** Total number of cubes: 20. Choose 5 cubes, record total of each color, return cubes to bag. Repeat for 15 trials.

Trial #	Blue	Green	Orange	Red
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
<b>Total</b>				
<b>Percent Represented</b>				

2. Based on Simulation Bag 1 trials, revisit your initial prediction. How many of each color cube do you think are in the bag? How does this compare to your starting prediction? Explain.

	Blue (white)	Green (Black)	Orange (Hispanic)	Red (Asian)	Total
<b>Revised Prediction</b>					<b>20</b>

3. Empty the cubes from the bag. Record the number of cubes for each color. Was your inference above a good estimation of what was in the bag?

	Blue (white)	Green (Black)	Orange (Hispanic)	Red (Asian)	Total
<b>Actual</b>					<b>20</b>

**Simulation Bag 2:** Total number of cubes: 20. Choose 5 cubes, record total of each color, return cubes to bag. Repeat for 15 trials.

Trial #	Blue	Green	Orange	Red
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
<b>Total</b>				
<b>Percent Represented</b>				

4. Based on Simulation Bag 2 results, how many of each color cube are in the bag? Explain how you came to this conclusion.

	Blue (white)	Green (Black)	Orange (Hispanic)	Red (Asian)	Total
<b>Estimated</b>					<b>20</b>

5. Empty the cubes from the bag. Record the number of cubes for each color. Was your inference above a good estimation of what was in the bag? Explain.

	<b>Blue (white)</b>	<b>Green (Black)</b>	<b>Orange (Hispanic)</b>	<b>Red (Asian)</b>	<b>Total</b>
<b>Actual</b>					<b>20</b>

6. Create graphs to represent your trial data and respective actual counts.